



A Case Study;



Blue Bar Coconut WWTP Queson, Philippines

Background

In 1995, Blue Bar Coconut, a leading manufacturer of food grade desiccated coconut, needed to comply with governmental wastewater discharge regulations at their plant in Queson, Philippines. To accomplish this, they built an up-to-date wastewater treatment plant, abandoning their outdated clarifier.

Problem

The engineers at Blue Bar Coconut found that even with their new wastewater treatment plant, they still had levels of oil and grease in their effluent which exceeded discharge regulations.



Solution

After thorough evaluation, Blue Bar Coconut found the problem was isolated to the way coconut milk was treated by their wastewater plant. Engineers from AEROMIX recommended a retrofit to the existing clarifier as the least costly solution for Blue Bar. A system was designed to separate the coconut oil from the wastewater prior to treatment utilizing one ZEPHYR Induced Air flotation (IAF) Unit.

By installing the ZEPHYR (IAF) in the middle of the clarifier, the oil could be separated, floating to the top and producing a scum around the perimeter. Wastewater, free of oil, could then escape from the bottom to be processed further. The microscopic air bubbles formed by the ZEPHYR (IAF)'s diffuser disc adhered to the oil, forcing the floatable solids to rise to the surface. The oil would then be raked off the top and recycled.

Blue Bar found this system both effective and profitable. Not only did they pass regulations, but they found they could sell the recycled oil to a leading suntan lotion manufacturer.